



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
ROCK ISLAND DISTRICT, CORPS OF ENGINEERS
CLOCK TOWER BUILDING - P.O. BOX 2004
ROCK ISLAND, ILLINOIS 61204-2004

AD-A198 659

ENVIRONMENTAL ASSESSMENT
PROPOSED LAKEVIEW MARINA SITE
BOAT RAMP AND ACCESS
SAYLORVILLE LAKE
POLK COUNTY, IOWA

AUGUST 1986

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ENVIRONMENTAL ASSESSMENT
PROPOSED LAKEVIEW MARINA SITE
BOAT RAMP AND ACCESS

SAYLORVILLE LAKE
POLK COUNTY, IOWA

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FINDING OF NO SIGNIFICANT IMPACT



EA-i

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Coordination Documentation
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ENVIRONMENTAL ASSESSMENT

PROPOSED LAKEVIEW MARINA SITE BOAT RAMP AND ACCESS

SAYLORVILLE LAKE
POLK COUNTY, IOWA

I. PURPOSE AND NEED FOR ACTION

The U.S. Army Corps of Engineers, Rock Island District, is proposing the development of a boat launch area at Saylorville Lake northwest of Des Moines, Iowa. The proposed site is located on project lands in Section 80, Township 80 North, Range 24 North, Polk County, Iowa (plate 1). The development of recreational facilities at Saylorville is authorized under Section 4 of the 1944 Flood Control Act. The proposed facility was initially identified as part of the development for a second marina at the project in the Master Plan, Design Memorandum 6B, Saylorville Lake Multi-Purpose Project, Des Moines River Basin, Des Moines, River, Iowa, prepared by the Rock Island District in September 1984. This selected site and one alternative location also were referenced in the Environmental Assessment prepared for the Master Plan, and coordinated with Federal, State, and local agencies.

The proposed boat ramp facility will meet a portion of the existing unfulfilled demand for additional launching facilities at the lake based on current boater registration, population, and competing facility data. The quality of the recreational experience also would be improved and user safety enhanced, by providing convenient and adequate access for peak use periods during high water conditions of the lake.

II. PROJECT DESCRIPTION

The proposed development (see plate 2) consist of: (1) a 500-foot-long paved 2-lane ramp approximately 50 feet wide with two 100-foot turning radii; (2) a 2,700-foot-long access road into the project site; (3) upper and lower paved parking lots totaling approximately 87,500 square feet; (4) a 300-foot access road to the lower parking lot; (5) a boatway channel located adjacent to the ramp to facilitate boater access for loading and unloading will be approximately 120 feet long, 14 feet wide and 6 feet deep; and (6) landscape plantings and ground covers. The design would include approximately 46,000 cubic yards of cut and fill, 7,500 tons of crushed stone, 15,000 square yards of blacktop, 2,000 square yards of concrete, and 6,500 tons of riprap.

The completed facility would provide access to Saylorville Lake during high water conditions (above elevation 860 NGVD) and at normal pool levels (elevation 836 NGVD). The benefit-to-cost ratio for the project is 2.2:1 with net annual benefits of \$87,800, based on a 50-year project life.

In the future, solicitation will be made for private commercial development of marina facilities in addition to the launching facilities developed by the Corps. Potential impacts due to construction and operation of a marina were discussed in the Saylorville Lake Master Plan and Environmental Assessment. It was determined that the lake could support an additional marina of 251 slips and 62 dry storage spaces without exceeding the physical capacity of the lake. Detailed designs and specifications of this facility would be determined by the prospective concessionaire. However, minimum facility requirements would include a fuel dispensing station, additional parking areas and access, waste water treatment/disposal, and water supply and electrical facilities. Potential impacts associated with these types of facility design features could involve short-term impacts to air and water quality and terrestrial resources resulting from construction, and long-term impacts to natural and man-made resources resulting from operation of the facility. Short-term impacts could include increased noise levels, particulates from exhaust fumes, and increased turbidity generated by construction equipment, as well as increased potential for erosion following removal of existing vegetation. Long-term impacts of operation could include localized deterioration of water quality due to oil and grease associated with boating activity, increased turbidity, and current/wave action from propeller action in shallow waters; benefits to aquatic organisms due to enhancement of substrate diversity following riprap placement; loss of terrestrial habitat; and, increased use of existing utilities and access roads.

While the impacts mentioned above are not currently anticipated to be significant, an adequate assessment of potential impacts cannot be accomplished without detailed project plans. Prior to the construction of any future marina facilities, an additional environmental assessment would be necessary to address the potential impacts of the proposed commercial facilities.

III. ALTERNATIVES.

A. No Action. If no action is taken, improved boater access and demand needs will not be fully met. Boat launching facilities available at the lake are not sufficient to meet current use demands. In addition, overuse at the existing boat ramps is causing deterioration of the facilities and unsafe traffic congestion during peak use periods. Administrative options which could be implemented as part of a no action alternative would not fully satisfy current public boating interest at the project.

B. Other Designs and Locations. Two alternative locations and a design modification were analyzed during earlier phases of planning. The ridge immediately north of the Lakeview Boat Launch and a site within Prairie Flower Recreation Area along the east shoreline of the lake within Big Creek embayment were both evaluated, as was a design modification at the preferred location involving construction of a bulkhead in lieu of the sloped revetment erosion protection in the selected design. These alternatives were dropped from further analysis because of physical limitations or potential for impacts to natural or cultural resources.

IV. AFFECTED ENVIRONMENT

A. Terrestrial Environment. The selected site borders the west shoreline of the lake approximately one-half mile northwest of the reservoir dam. The eastern one-half portion of the area is wooded with an uneven aged upland hardwood association. A transition zone exists north of the wooded area to the inlet area bordering the south boundary of the Lakeview recreation area parking lot. The western one-half portion of the area consists of an open upland field and an open bottomland area.

The upland hardwood association consists of white oak (Quercus alba), shagbark hickory (Carya ovata), black walnut (Juglans nigra), sugar maple (Acer saccharum) and red oak (Quercus borealis rubra). The understory of the wooded area consists of honey locust (Gleditsia tricanthos), black cherry (Prunus serotinia), gray dogwood (Cornus racemosa) and a smaller number of white mulberry (Morus alba) and blackberry (Celtis occidentalis). Ground covers found in the forested area include phlox (Phlox sp.), anemone (Isopyrum biternatum), bloodroot (Sanguinaria canadensis), virginia creeper (Parthenocissus quinquefolia), honeysuckle (Lonicera sp.) sedge (Carex sp.) nettle (Urtica sp.), raspberry (Rubus sp.), currant (Ribes sp.) poison ivy (Toxicodendron radicans) and a small number of Christmas ferns (Polystichum acrostichodes).

The transition zone consists of yellow sweet clover (Melilotus officinalis) with a small amount of red clover (Trifolium pratense) intermixed. A moderate number of sapling and intermediate-size cottonwood (Populus deltoides) and willow trees (Salix sp.) are distributed throughout the lower elevations. The upper elevations of the zone have a ground cover of yellow sweet clover, red clover, and a small amount of brome grass (Bromus sp.). Trees within the upper zone include sapling and intermediate size shagbark hickory, sumac (Rhus glabra) and white ash (Fraxinus americana).

The upland field area has a dominant ground cover of yellow sweet clover, brome grass, and switchgrass (Paspalum virgatum) with small amounts of goldenrod (Solidago sp.) poison ivy, milkweed (Amaranthus sp.), thistle (Cirsium sp.), dock (Rumex sp.) and pigweed (Amaranthus sp.). The open bottomland area has a dominant ground cover of yellow sweet clover with some red clover and giant ragweed (Ambrosia trifida) present. A small amount of sapling and intermediate size cottonwood

(Populus deltoides) and willow trees (Salix sp.) are present.

The proposed site has the potential for utilization by the terrestrial animals listed below:

white-tailed deer	<u>Odocoileus virginianus</u>
raccoon	<u>Procyon lotor</u>
eastern fox squirrel	<u>Sciurus niger</u>
eastern gray squirrel	<u>Scurus carolinensis</u>
eastern red squirrel	<u>Tamiasciurus hulsonibcus</u>
thirteen-lined ground squirrel	<u>Citellus tridecemlineatus</u>
opposum	<u>Didelphis marsupialus</u>
red fox	<u>Vulpes fulva</u>
gray fox	<u>Urocyon cinereoargenteus</u>
eastern cottontail	<u>Sylvilagus flouclanus</u>
deer mouse	<u>Peromycus maniculatus</u>
plains pocket mouse	<u>Perognathus flavescens</u>
prairie vole	<u>Microtus ochrogaster</u>
meadow vole	<u>Microtus pennsylvanieus</u>
eastern mole	<u>Scalapus aquatius</u>
white-footed mouse	<u>Peromysus leucopus</u>

B. Aquatic Environment. The aquatic area of the site is apart of the transition and lacustrine habitats of the Saylorville Lake reservoir. This area is subject to current/wave action and fluctuations in pool level. the substrate is composed of varying amounts of silt.

A review of aquatic reports and records for Saylorville Lake listed the following species as utilizing the aquatic habitat near the Lakeview area:

minnow	<u>Cyprinidae</u> (family)
shiner	<u>Notropis</u> sp.
carp	<u>Cyprinus carpio</u>

river carpsucker	<u>Carpiodes carpio</u>
channel catfish	<u>Ictalurus punctatus</u>
buffalo	<u>Ictiobus sp.</u>
walleye	<u>Stizostedion vitreum</u>
crappie	<u>Pomoxis annularis</u>
largemouth bass	<u>Micropterus salmoides</u>
wiper	<u>Morone saxatilis</u> <u>Morone chrysops</u>
northern pike	<u>Esox lucius</u>
bluegill	<u>Lepomis macrochirus</u>
yellow perch	<u>Perca flavescens</u>
freshwater drum	<u>Aplodinotus grunniens</u>

V. ENVIRONMENTAL CONSEQUENCES OF PREFERRED ACTION.

An environmental analysis has been conducted for the proposed action, and a discussion of the impact follows. This discussion of environmental impacts will focus only on the impacts of the proposed boat launching facility and access. The discharge of dredged and fill materials into the waters along the shoreline area for construction of the boat ramp and boatway is addressed in the attached Section 404(b)(1) evaluation.

A. Social Impacts of the Preferred Action.

1. Noise. Heavy machinery used during the fall months would generate a temporary increase in noise during construction. This increase might disturb users of Lakeview Boat Launch, located approximately 200 yards away. However, no sensitive receptors, e.g., schools, are located within 1 mile of the site. When completed, the proposed recreational facility would have a minor, if any, effect on noise levels.

2. Displacement of people. No relocation would be required for the project.

3. Aesthetics. The overall aesthetic setting of the site will not change significantly. Approximately 4 acres of the natural

landscape would be altered. Grasses, shrubs, and trees will be planted in the area to complement the physical features with the surrounding natural resources.

4. Desirable Community Growth. Based on the small scale of the project, few employees would be required. The surrounding area would not be affected since the local population provides a labor pool of sufficient size to absorb project needs.

5. Recreation. Establishing a new launch ramp and supporting facilities will have a positive effect on recreation by enhancing the access and quality of recreational opportunities. The capacity of the lake to support additional boating activity generated by a second marina and associated launching facilities was evaluated in the Saylorville Lake Master Plan. The projected increase in activity resulting from the second marina did not exceed the carrying capacity of the lake. No increase in use beyond that resulting from marina and boat ramp operation is anticipated for operation of the ramp facility alone. This action will improve the recreational experience by fulfilling the public's recreational boating demands, and by reducing overcrowding and the damage to the natural and manmade resources at existing recreational boating facilities attributed to existing overuse.

6. Community Cohesion. No effects on community cohesion would be expected due to the type of project and the limited area of influence.

B. Economic Impacts of the Preferred Action.

1. Property Value. No effects on property values would be expected.

2. Tax Revenue. This action involves only Federal lands, and no impact will occur to the local tax base as a result of implementation.

3. Public Facilities. An additional public recreational boat launch would decrease present and future overcrowding at other launch facilities at Saylorville Lake. This will result in a more enjoyable recreational experience for users.

4. Public Services. The additional boat ramps provided by the project would help to fulfill a portion of the existing recreational boating needs of the general public within Polk County and outlying areas.

5. Regional Growth. No significant effects on regional growth would be expected as a result of the proposed action.

6. Employment/Labor Force. The project would not affect the permanent employment or labor force in Polk County. However, the project would temporarily increase area employment during the construction phase.

7. Business and Industrial Activity. No long-term effects on business and industrial activity would result from the project; however, a minor, short-term benefit to supply and construction companies would occur. The increase in business activity occurring from the temporary infusion of construction workers would be absorbed into the area without long-term effect. No business relocations would be required for the project.

8. Displacement of Farms. The site was purchased by the Federal Government for the storage of floodwaters associated with the operation of the Saylorville Lake Flood Control Project. Section 658.2, page 27724 of the Federal Register dated 5 July 1984, addressing the Farmland Protection Policy Act states: "Prime farmland does not include land already in or committed to urban development or water storage." Therefore, the action is not considered applicable to the Farmland Protection Policy. Except for the upland hardwood portion of the site, the area was used as borrow material for the construction of Saylorville Dam. As a result, the soils remaining are not felt to be prime or unique farmland soils.

C. Environmental Impacts.

1. Manmade Resources. The addition of a new boat launch and supporting facilities would have a positive impact on recreation as described under Section V, Part A, Social Impacts of the Preferred Action, paragraph 5, Recreation.

2. Natural Resources.

a. Terrestrial Resources. There will be minor, temporary adverse impacts caused by construction in the proposed site area during the fall season. Construction machinery will generate noise and dust and create a temporary unfavorable environment. Construction of the new launch ramp and supporting facilities will impact approximately 4 acres of early successional species of 35 to 45 sapling and intermediate size trees. The loss of this habitat will have a minor to moderate impact on wildlife within the area due to the uninterrupted nature of the early succession area (i.e., open upland and bottomland area, transition zone). These impacts will be reduced through natural succession and the planting of approximately 1 acre of

grasses, shrubs and trees beneficial to wildlife habitat enhancement as part of the new facility development.

The upland forested area will lose 10 to 20 sapling and intermediate size trees (included in the 35-45 mentioned above) along the western border of the stand due to the access road alignment. Landscape plantings associated with the new facilities will add to the variety of natural resources within the area. The new plantings include grasses, bushes, and trees.

Construction activity will be required to follow practices to reduce the potential of erosion according to guide specifications (CW-01430, July 1978). This would involve the use of gravel, grasses, mulches, and temporary berms.

The proposed project will result in a minor loss and displacement of species which utilize the bottomland habitat (i.e., raccoon, woodchuck, etc.). A minor to moderate adverse effect on upland species would occur due to the disruption of existing travelways and winter cover. These impacts will be reduced through natural succession, and by the planting of grasses, shrubs and trees beneficial to wildlife habitat enhancement associated with the landscaping features for the new facilities.

b. Aquatic Resources. The proposed launch ramp may have a minor impact on approximately 7,500 square feet of shoreline and shallow aquatic habitat. From a conservation pool elevation of 836 NGVD, the ramp would extend into the water approximately 50 feet. Approximately 1,200 tons of Class D riprap will be placed in the water on either side of the ramp along the shoreline to protect the ramp from erosion. In addition, 60 tons of Class A crushed stone will be placed in the water as a foundation for the ramp. Approximately 178 square yards of the concrete ramp will rest on the crushed stone. As a result 7,500 square feet of existing habitat would be lost. However, placement of riprap may create limited, increase habitat diversity within the immediate area.

The proposed boatway will require approximately 500 square yards of concrete, 600 tons of Class A crushed stone bedding, 2,500 tons of riprap and 10,000 cubic yards of cut and fill material. The majority of the impact would take place on land and only 4,000 square feet of aquatic habitat will be impacted.

During ramp and boatway construction, machinery and motor vessels will generate noise and turbidity. These impacts will create a temporary unfavorable impact for aquatic and semiaquatic organisms. The placement of 1,200 tons of Class D riprap and 60 tons of Class A stone into the water will temporarily increase water turbidity.

The riprapping provides a small benefit to the aquatic habitat within the area of the new ramp by adding diversity to the existing substrate which could increase the invertebrate population. This also should benefit fisheries by providing food cover and spawning areas for

certain species of fish. Additional information can be found in the attached 404(b)(1) evaluation. Operation of the launch facility may have localized adverse effects on the aquatic habitat through physical disturbance (prop wash, current/wave action), and may result in increased fishing activity. These activities should not significantly affect the aquatic resources of Saylorville Lake.

3. Air Quality. Other than exhaust emissions and dust from construction equipment, the project will have no effect on air quality.

4. Water Quality. The proposed facility will not have a significant impact on the water quality of the lake area. A temporary increase in turbidity will occur during the construction of the launch ramp and boatway with the placement of riprap and foundation rock into the river. Impacts associated with operation of the new facility (oil and grease, sediment resuspension, etc.) are not anticipated to be significant. The discharge of dredged and fill materials into the water for the construction of the boat ramp and boatway is addressed in the attached 404(b)(1) evaluation. The Iowa Department of Water, Air and Waste Management has waived State Section 401 certification for this project in a letter dated 10 July 1986.

5. Water Conservation. The project will have no effect on water conservation.

6. Endangered Species. No federally listed endangered species are reported for Polk County, Iowa. The bald eagle (Haliaeetus leucocephalus) does use the tailrace area below the dam for feeding and perching during the winter months. The new facility is approximately 1 mile northwest of the tailrace and would not be in use during the winter months. Therefore, no impacts are anticipated.

7. Archeological/Cultural Resources. The National Register of Historic Places has been consulted in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended. No sites listed on or eligible for the National Register are in the proposed project area.

VI. ENVIRONMENTAL IMPACTS OF THE NONPREFERRED ALTERNATIVES.

If the new launching ramp and supporting facilities were not constructed (no action), damage to the manmade and natural resources of other boat ramps within the lake area would continue to occur during peak periods of use. The potential short- and long-term impacts of alternative sites and designs would be greater than or equivalent to the selected site.

VII. PROBABLE ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED.

Temporary impacts caused by construction activities such as noise, dust, and increased local turbidity cannot be avoided. The removal of early successional species and sapling and intermediate size trees is necessary to construction of the launch ramp and supporting facilities.

VIII. RELATIONSHIP BETWEEN SHORT-TERM USE OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY.

The loss of early successional species and small trees will be alleviated over time by the planting of grasses, shrubs, and trees. These plantings will complement the natural aesthetics and habitat diversity of the area.

IX. ANY IRREVERSIBLE OR IRRETRIEVABLE COMMITMENTS OF RESOURCES WHICH WOULD BE INVOLVED IF THE PROPOSED ACTION SHOULD BE IMPLEMENTED.

Fuel and hours used during the construction of the proposed recreational area can be classified as being irretrievable.

X. RELATIONSHIP OF THE PROJECT TO LAND-USE PLANS.

The primary purpose of the land is for flood control associated with the Saylorville Lake civil works project. In addition to flood control benefits, the project fulfills a multi-purpose role by providing recreation and water supply benefits. The site of the proposed project is owned by the Corps of Engineers and currently managed for intensive recreational use. The new facilities are consistent with designated land use practices in the project Master Plan, and will not directly affect existing land use practices of adjacent non-project lands.

XI. COMPLIANCE WITH ENVIRONMENTAL QUALITY STATUTES.

A. Endangered Species. The proposed site was identified and evaluated for impacts to endangered species and important fish and wildlife resources in the Environmental Assessment for the Saylorville Lake Master Plan, and coordinated with the Fish and Wildlife Service (see attached response dated 18 April 1984. Coordination with the Rock Island Field Office of the U.S. Fish and Wildlife Service concerning the proposed action was made in a letter dated 14 July 1986 (attached). There are no federally listed endangered species reported for Polk County, Iowa. The bald eagle (*Haliaeetus leucocephalus*) does use the tailrace below the dam for feeding and perching during the winter months. It is concluded that no impacts are anticipated because

the proposed facility is approximately 1 mile northwest of the tailrace and would not be used during the winter months.

The Iowa Department of Natural Resources was also coordinated with during preparation of the Environmental Assessment for the Saylorville Lake Master Plan regarding the project recreation plans and design features (see attached response dated 20 December 1983).

B. Archeological/Cultural. In accordance with a Memorandum of Agreement between the Corps of Engineers, Iowa State Historical Department, Office of Historic Preservation, and the Advisory Council of Historic Preservation dated 13 March 1986 (see attached), the proposed site area is considered cleared. The Iowa SHPO concurred with this determination in a letter dated 1 August 1986. The decision is based on previous intensive surveys and tests to locate cultural deposits and to evaluate their significance. If work uncovers item(s) which might be of historical, archeological, or architectural interest, or if new data would come to light in the project area, the work should be delayed for sufficient time to notify the State Historic Preservation Officer (SHPO) in order that the significance of the discovery can be determined.

C. Federal Water Project Recreation Act. The new boat ramp and supporting facilities are under full Federal funding authority, and will be operated and maintained by the Corps of Engineers. Existing facilities funded by the Federal Government will not be affected.

D. Fish and Wildlife Coordination Act. The U.S. Fish and Wildlife Service and the Iowa Department of Natural Resources are being coordinated with as part of the preparation of this assessment by letter dated 14 July 1986.

E. E.O. 11988 - Flood Plain Management. The project will have no effect on the development of the habitable structures in the floodplain. Flood heights will not be affected by the proposed recreational area.

F. Wild and Scenic Rivers Act. No wild and scenic rivers will be affected by the proposed recreational improvements.

G. E.O. 11990 - Protection of Wetlands. No wetlands will be affected by the proposed recreational improvements.

H. Clean Water Act. A Section 404(b)(1) evaluation report has been prepared (attached), and waiver of 401 certification has been received from the Iowa Department of Water, Air and Waste Management.

I. Clean Air Act. The project should not violate the provisions of the Clean Air Act.

J. Monitoring and Mitigation. The Rock Island District will monitor the construction of the proposed development for compliance with design specifications and applicable environmental concerns (i.e. erosion abatement and undiscovered cultural resources).

K. Farmland Protection Policy Act. No prime or unique farmland soils will be affected by the proposed recreation improvements.

XII. CONCLUSIONS.

The proposed recreational development will have no adverse effects on human environment. The action will improve the recreational experience by fulfilling public recreational boating needs, and reducing overcrowding and damages to the natural and manmade resources at existing recreational boating facilities (at the lake) attributed to overuse during high water condition of the lake. Plantings for aesthetic and habitat diversity improvement have been incorporated into the site design. The plantings will be of benefit to wildlife and serve to minimize long-term impacts.

XIII. COORDINATION.

The following agencies were coordinated with during the preparation of this Environmental Assessment:

U.S. Fish and Wildlife Service
Iowa Department of Natural Resources
U.S. Environmental Protection Agency
Iowa State Historic Preservation Officer
U.S. Soil Conservation Service

The U.S. Environmental Protection Agency, in a letter dated 25 July 1986, expressed several concerns regarding potential impacts of the proposed action. These concerns are summarized as follows:

(1) COMMENT: The potential impacts associated with development of the marina facility must be addressed by the NEPA evaluation for the currently proposed plan.

RESPONSE: See Section II, paragraphs 3 and 4, page EA-2.

(2) COMMENT: Depending on the level of traffic using the proposed development, locally significant impacts to air quality and noise levels may occur.

RESPONSE: Short-term impacts to air quality and noise levels may occur due to construction activity. No violations of air quality standards are anticipated. Long-term impacts to ambient noise levels are not anticipated to be significant.

(3) COMMENT: Paved surface areas could deliver a significant amount of runoff to the reservoir, resulting in localized water quality impacts.

RESPONSE: The paved surface areas will constitute a very small percentage of the reservoir's drainage. Runoff from these areas should not significantly affect existing water quality.

(4) COMMENT: The evaluation should address the potential for erosion during construction and erosion control practices to be used.

RESPONSE: See Section V (paragraph C.2.a.).

FINDING OF NO SIGNIFICANT IMPACT

Having reviewed the information in the environmental assessment, I find that the proposed Boat Ramp and Access facilities will have no significant effects on the environment. Therefore, these proposed recreational improvements do not necessitate the preparation of an Environmental Impact Statement (EIS). This determination may be reevaluated if warranted by later developments.

Factors that were considered in making this determination that an EIS is not required were:

a. There will be no significant impact to water quality as discussed in the Environmental Assessment. A section 404(b)(1) evaluation has been prepared, and the Iowa Department of Water, Air, and Waste Management has waived Section 401 certification.

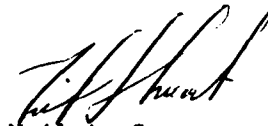
b. Any negative impacts which could occur from the construction of the recreational improvements are minor to moderate in effect; positive impacts on recreation are long-term in nature. The effects of these impacts will be offset by the incorporation of landscape and wildlife plantings into the site design to add diversity to the natural resources of the area.

c. Wildlife resources will not be harmed by the proposed recreational improvements.

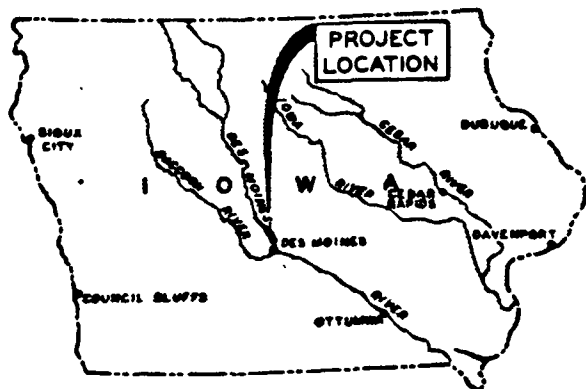
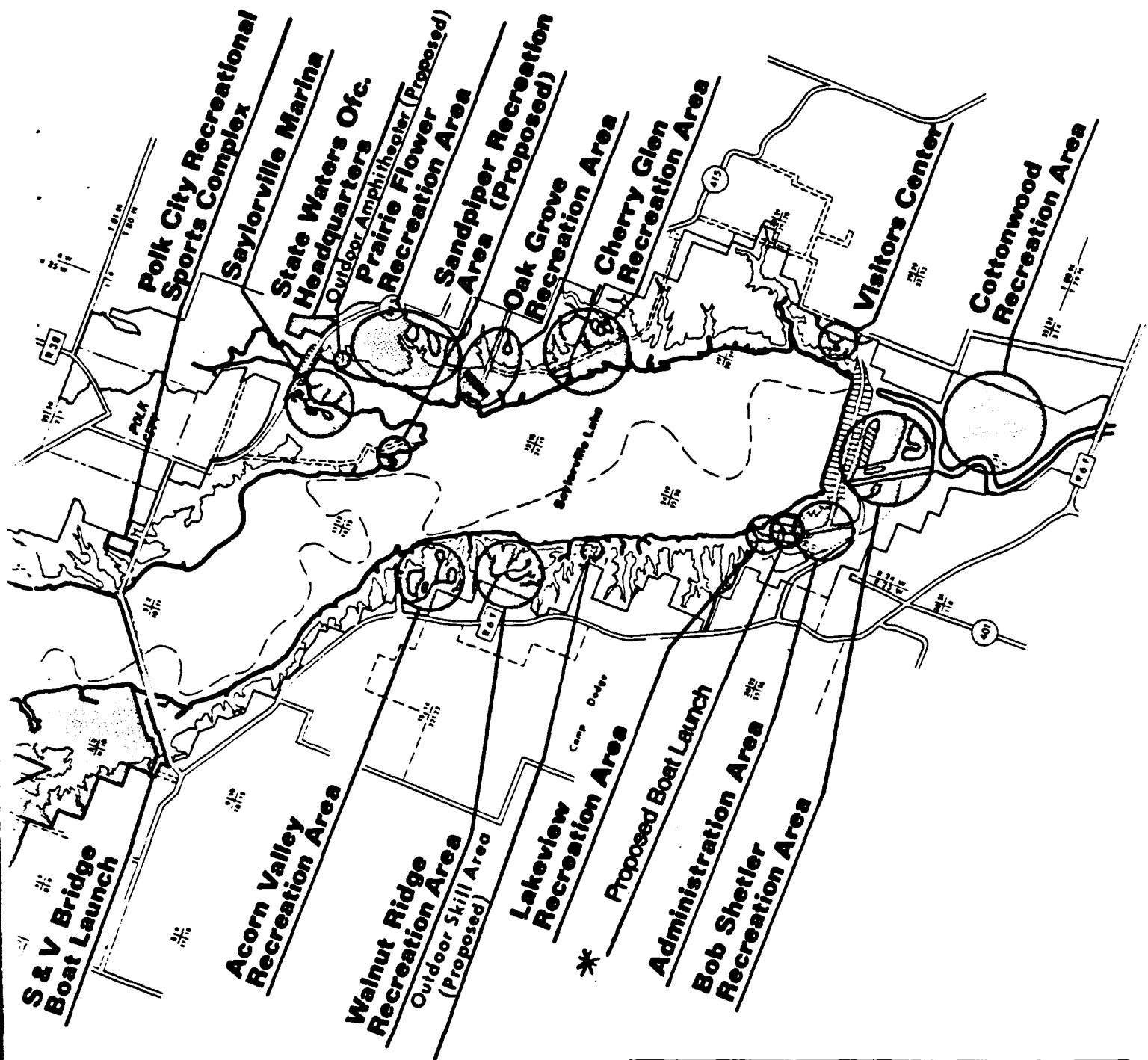
d. No significant environmental, social, economic, or cultural impacts are anticipated as a result of the action.

9 Sept 86

date



Neil A. Smart
Colonel, Corps of Engineers
District Engineer

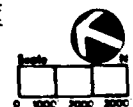


**Saylorville Lake
Master Plan**

RECREATION AREAS

Legend

Flood Pool Limit
City Limits
Project Boundary
Paved Road
Unpaved Roads



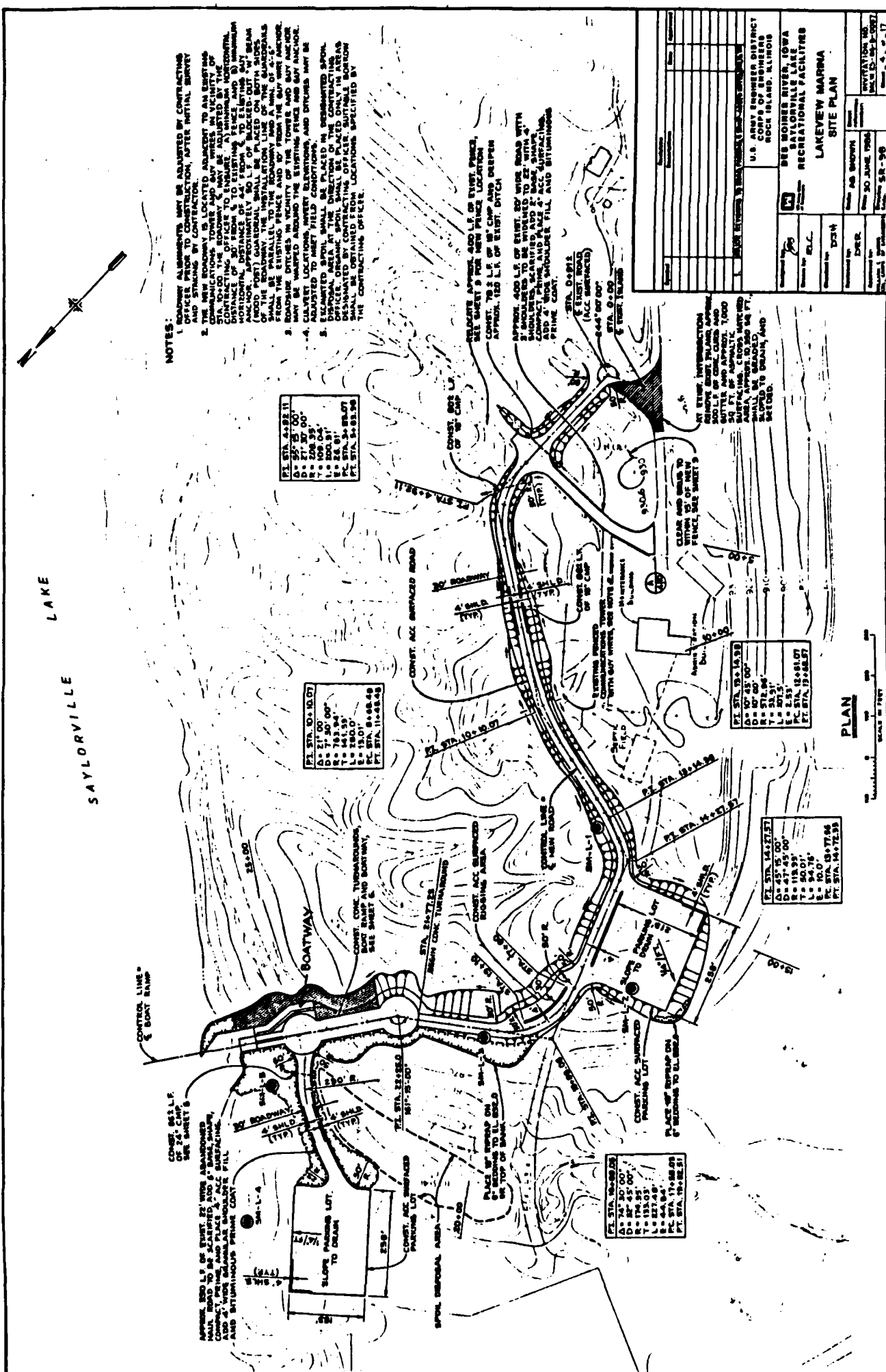


PLATE 2

**IOWA STATE HISTORICAL DEPARTMENT
OFFICE OF HISTORIC PRESERVATION**

**ADRIAN D. ANDERSON, Executive Director
STATE HISTORIC PRESERVATION OFFICER**

AUG 01 1986

**Dudley M. Hanson, P.E.
Acting Chief, Planning Division
Rock Island District Corps of Engineers
Clock Tower Building
P.O. Box 2004
Rock Island, IL 61204-2004**

**RE: DEVELOPMENT OF BOAT LAUNCH AREA -
SAYLORVILLE LAKE - SEC. 30, T. 80N., R.24 W. -
POLK COUNTY**

Dear Mr. Hanson:

Based on the information you provided, we find the proposed project to have no effect upon known historic or other cultural resources. Therefore, we recommend project approval.

However, if the proposed project work uncovers an item or items which might be of archeological, historic or architectural interest, or if important new archeological, historic or architectural data come to light in the project area, the work should be delayed for sufficient time to notify this office in order that the significance of the discovery can be determined.

Should you have any questions or if we can be of further assistance to you, please contact Dr. Kay Simpson, Chief, Archeological Surveys, at 515-281-8744 or Mr. Ralph Christian, Chief, Architectural Surveys, at 515-281-8697.

Sincerely,


David Crosson
State Historic Preservation Officer

/mdd



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
726 MINNESOTA AVENUE
KANSAS CITY, KANSAS 66101

July 25, 1986

Colonel William C. Burns, Jr., USA
District Engineer
U.S. Army Engineer District, Rock Island
Clock Tower Building - P.O. Box 2004
Rock Island, Illinois 61204-2004

ATTN: Planning Division

Dear Colonel Burns:

Thank you for your letter of July 14, 1986, inviting our comments on your proposal to develop a boat launch area adjacent to the Lakeview Recreation Area at Saylorville Reservoir near Des Moines, Iowa. We agree that the proposed facility would be expected to benefit recreational users of the reservoir. Accordingly, we offer the following comments to assist you in conducting the environmental evaluation of your project as required by the National Environmental Policy Act (NEPA).

Scope of NEPA Evaluation

Your letter indicates that future developments associated with the project may include construction of marina facilities by a private developer with the approval of the Corps of Engineers. Although your letter states this future development would be addressed by a separate environmental assessment, we believe it constitutes a related and reasonably-foreseeable future action within the context of the Council of Environmental Quality regulations; therefore, the potential impacts associated with development of the marina facility must be addressed by the NEPA evaluation conducted for the currently proposed action (see 40 CFR 1508.25). We acknowledge that precise design information for the marina facility may not be available within the timeframe of the currently proposed action. However, information such as anticipated use rates, traffic levels and flow patterns, parking area needs, and utility extension requirements which may influence design considerations and environmental impacts of the current project, should be included and evaluated.

Air/Noise Quality

The proposed project would be located in a currently undeveloped area, adjacent to areas developed for recreational use. Depending on the level of traffic using this proposed

development, locally significant impacts to air quality and ambient noise levels may occur. We suggest that your project environmental evaluation contain traffic projections, including increased traffic associated with use of the marina facilities. These traffic projections should be used to model predicted air quality impacts and noise level increases. Predictive techniques used by the Federal Highway Administration should be appropriate for this analysis.

Stormwater Runoff

Information contained in your letter indicates the currently proposed project would involve in excess of six acres of paved areas. An unknown amount of additional paved area would be required for access to, and parking for, the marina facility. This amount of paved surface could deliver a significant amount of runoff to the adjacent reservoir areas during storm events. Your NEPA evaluation should detail provisions for routing and treatment of stormwater runoff from these paved areas, and evaluate the potential for localized water quality impacts.

Construction

Since the proposed project is located immediately adjacent to the reservoir, the potential exists for temporary, short-term water quality impacts resulting from erosion of areas cleared for construction. Your evaluation should address this potential, and detail erosion control practices which will be used to minimize impacts.

Thank you again for the opportunity to comment on your proposed actions. We will be happy to discuss our comments further with your staff if you so desire, and would like to review the draft environmental evaluation for this project when it becomes available. If you have questions, please contact Lynn Kring of my staff at 913/236-2823 or FTS 757-2823.

Sincerely yours,



Edward C. Vest
Chief, EIS Section

TELEPHONE OR VERBAL CONVERSATION RECORD

For use of this form, see AR 340-15; the proponent agency is The Adjutant General's Office.

DATE

25 Jul 86

SUBJECT OF CONVERSATION

Lake View Boat Ramp

INCOMING CALL**PERSON CALLING**

Ms. Gail Carmody

ADDRESSUSFWS, Rock Island Field Office
1820 2nd Ave, Rock Island, IL**PHONE NUMBER AND EXTENSION**

309/792-5800

PERSON CALLED

Ms. Karen Bahun

OFFICE

NCRPD-E

PHONE NUMBER AND EXTENSION

389/788-6361, Ext. 384

OUTGOING CALL**PERSON CALLING****OFFICE****PHONE NUMBER AND EXTENSION****PERSON CALLED****ADDRESS****PHONE NUMBER AND EXTENSION****SUMMARY OF CONVERSATION:**

Ms. Carmody received our letter, dated 14 Jul 86, requesting FWS comments on the subject project. She indicated that at this time she has no comments on the proposed project. The RIFO will wait for receipt of the Environmental Assessment and will then provide written agency comments.

KAREN L. BAHUS
Biologist
Environmental Analysis Branch



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
ROCK ISLAND DISTRICT, CORPS OF ENGINEERS
CLOCK TOWER BUILDING - P.O. BOX 2004
ROCK ISLAND, ILLINOIS 61204-2004

July 14, 1986

Planning Division

SEE DISTRIBUTION

The U.S. Army Corps of Engineers, Rock Island District, is proposing the development of a boat launch area at Saylorville Lake northwest of Des Moines, Iowa. The proposed site is located on project lands in sec. 30, T. 80 N., R. 24 W., Polk County, Iowa. A location map and engineering design are enclosed. The following facilities would be constructed by the U.S. Army Corps of Engineers:

- a. A 2,700-foot-long paved access road into the project site;
- b. upper and lower paved parking lots;
- c. a 300-foot access road to the lower parking lot;
- d. a 500-foot-long paved two-lane ramp approximately 50 feet wide with two 100-foot turning radii; and
- e. a boatway approximately 120 feet long, 14 feet wide, and 6 feet deep.

Landscape plantings and grass seeding would be incorporated into the project design.

The development of recreational facilities at Saylorville was initiated at full Federal expense under the direction of Section 4 of the Flood Control Act of December 22, 1944. The development and construction of these facilities has continued at full Federal expense under the authorization of Section 111 of the Water Resources Development Act of 1976.

The proposed launching facility is located south of the existing Lakeview Recreation Area. The launch ramp would meet a portion of the existing unfulfilled demand

for additional launch facilities at Saylorville Lake. The design would include 46,000 cubic yards of cut and fill, 7,400 tons of crushed stone, 15,000 square yards of blacktop, 2,000 square yards of concrete, and 6,500 tons of riprap.

The District is in the process of developing an Environmental Assessment and Section 404(b)(1) Evaluation report to address the proposed launching facility. In the future, a marina developer may be given the opportunity to develop marina facilities in addition to the launch facilities being proposed by the Corps. Prior to the construction of the marina facilities, an additional Environmental Assessment and Section 404(b)(1) Evaluation (if needed) will be developed to address the potential impacts of those facilities (marina facilities).

The proposed launch site area has a variety of vegetation. The eastern one-half portion of the site is wooded with an unevenaged upland hardwood association of white oak (Quercus alba), shagbark hickory (Carya ovata), black walnut (Juglans nigra), sugar maple (Acer saccharum), and red oak (Quercus borealis rubra). The understory of the wooded area consists of honey locust (Gleditsia triacanthos), black cherry (Prunus serotina), gray dogwood (Cornus racemosa), elm (Ulmus sp.) and a smaller number of white mulberry (Morus alba) and hackberry (Celtis occidentalis). Ground covers found in the forested area include phlox (Phlox sp.), anemone (Isopyrum biternatum), bloodroot (Sanguinaria canadensis), virginia creeper (Parthenocissus quinquefolia), honeysuckle (Lonicera sp.), sedge (Carex sp.), nettle (Urtica sp.), raspberry (Rubus sp.), currant (Ribes sp.), poison ivy (Toxicodendron radicans), and a small number of Christmas ferns (Polystichum acrostichodes).

A transition zone exists from the north end of the wooded area to the inlet area bordering the south end of the Lakeview Recreation Area parking lot. The lower elevations of the zone are dominated by a ground cover of yellow sweet clover (Melilotus officinalis) with a small amount of red clover (Trifolium pratense).

intermixed. A moderate number of sapling and intermediate size cottonwood (Populus deltoides) and willow trees (Salix sp.) are distributed throughout the lower elevations. The upper elevations of the zone have a ground cover of yellow sweet clover, red clover, and a small amount of brome grass (Bromus sp.). Trees within the upper zone include sapling and intermediate size shagbark hickory, sumac (Rhus glabra), and white ash (Fraxinus americana).

The western one-half portion of the proposed site consists of an open upland field and an open bottomland area. The upland field has a dominant ground cover of yellow sweet clover, brome grass, and switchgrass (Paspalum virgatum), with small amounts of goldenrod (Solidago sp.), poison ivy, milkweed (Asclepias sp.), thistle (Cirsium sp.), dock (Rumex sp.) and pigweed (Amaranthus sp.). The open bottomland area has a dominant ground cover of yellow sweet clover with some red clover and giant ragweed (Ambrosia trifida) present. A small amount of sapling and intermediate size cottonwood, and willow trees (Salix sp.) are present.

Impacts to the terrestrial resources in the upland hardwood area would result in the loss of 10 to 20 sapling and intermediate size trees due to the access road alignment running parallel to the western edge of the stand. No other losses are anticipated in the open area bordering the timber stand because the area currently is used for gravel and building supply storage. The road alignment will occupy 2 acres of land. The open upland field area would lose approximately 1 1/2 acres of early succession species attributed to the access road alignment and the upper parking lot area. The alignment of the access road and launch ramp in the transition zone would result in the loss of approximately 1 acre of early successional species. In addition, approximately 20 to 25 sapling and intermediate cottonwood and willow trees located in the lower elevations of the transition zone would be lost. In the open bottomland area, approximately 1 1/2 acres of early successional species and 5 sapling size willow trees would be lost.

The discharge of materials into the shoreline area for the construction of the boat ramp and boatway will be addressed in a Section 404(b)(1) evaluation report and Section 401 processing for certification. Impacts to aquatic resources from these discharges will be minimal and the finished boat ramp will be chemically and physically stable and noncontaminating.

A preliminary field investigation indicated the proposed site is inhabited by the terrestrial animals listed below:

whitetail deer	<u>Odocoileus virginianus</u>
raccoon	<u>Procyon lotor</u>
eastern fox squirrel	<u>Sciurus niger</u>
eastern gray squirrel	<u>Sciurus carolinensis</u>
red squirrel	<u>Tamiasciurus hudsonicus</u>
thirteen lined ground squirrel	<u>Citellus tridecemlineatus</u>
opossum	<u>Didelphis marsupialis</u>
red fox	<u>Vulpes fulva</u>
gray fox	<u>Urocyon cinereoargenteus</u>
eastern cottontail	<u>Sylvilagus floridanus</u>
deer mouse	<u>Peromyscus maniculatus</u>
plains pocket mouse	<u>Perognathus flavescens</u>
prairie mole	<u>Microtus ochrogaster</u>
meadow mole	<u>Microtus pennsylvanicus</u>
eastern mole	<u>Scalopus aquaticus</u>
white footed mouse	<u>Peromyscus leucopus</u>

If the proposed project were established, there would be a minor loss and displacement of species which utilize the bottomland habitat (i.e. raccoon, woodchuck, etc.). A minor to moderate adverse effect on upland species would occur due to the disruption of existing travel ways and winter cover. Fortunately these impacts will be reduced through natural succession and the planting of grasses, shrubs, and trees beneficial to wildlife habitat enhancement.

A review of aquatic reports and records for Saylorville Lake listed the following fish species utilizing the aquatic habitat near the proposed site area:

minnow	<u>Cyprinidae</u> (family)
shiner	<u>Notropis</u> sp.
carp	<u>Cyprinus</u> <u>carpio</u>
river carpsucker	<u>Carpiodes</u> <u>carpio</u>
channel catfish	<u>Ictalurus</u> <u>punctatus</u>
buffalo	<u>Ictiobus</u> sp.
walleye	<u>Stizostedion</u> <u>vitreum</u>
crappie	<u>Pomoxis</u> <u>annularis</u>
largemouth bass	<u>Micropterus</u> <u>salmoides</u>
wiper	<u>Morone</u> <u>saxatilis</u> X
	<u>Morone</u> <u>chrysops</u>
northern pike	<u>Esox</u> <u>lucius</u>
bluegill	<u>Lepomis</u> <u>macrochirus</u>
yellow perch	<u>Perca</u> <u>flavescens</u>
freshwater drum	<u>Aplodinotus</u> <u>grunniens</u>

If the proposed project were established, temporary minor impacts to fish and other aquatic organisms would occur due to turbidity and noise during construction. These impacts will create a temporary unfavorable impact for aquatic and semiaquatic organisms. However, the riprap would provide a small benefit to the aquatic habitat within the aquatic area of the proposed ramp and boatway by adding diversity to the existing substrate which could increase the invertebrate population.

No federally listed endangered species are reported for Polk County. The Bald eagle (Haliaeetus leucocephalus) does use the tail race area below the dam for feeding and perching during the winter months. The proposed facility is approximately 1 mile northwest of the tailrace and would not be in use during the winter months. Therefore, no impacts are anticipated.

The proposed site is within the boundaries of the Lakeview Recreation Area and the Administration Area. In accordance with a Memorandum of Agreement between the Corps of Engineers and the Advisory Council of Historic Preservation dated March 13, 1986, these areas are considered cleared from further cultural review due to previous intensive surveys and tests to locate cultural deposits and to evaluate their significance. No significant sites were found in these areas.

The long-term effect of the launch ramp development is expected to be beneficial for recreation users. Impacts to wildlife are expected to be moderate and will be reduced by planting trees, shrubs, and grasses beneficial to wildlife. The transition zone and open bottomland and upland areas were former borrow sites that were reseeded in clover and brome grass. The alignment of the proposed facilities in these areas, as well as near the upland hardwood area, was done in a manner to minimize impacts.

If you have any questions, please call Mr. Tim Toplisek of our Environmental Analysis Branch at 309/788-6361, Ext. 570, or write to the following address:

District Engineer
U.S. Army Engineer District, Rock Island
ATTN: Planning Division
Clock Tower Building - P.O. Box 2004
Rock Island, Illinois 61204-2004

Sincerely,

Dudley M. Hanson, P.E.
Chief, Planning Division

Enclosures

DISTRIBUTION:

Mr. Richard Nelson
Field Supervisor
U.S. Fish and Wildlife Service
Rock Island Field Office
1830 Second Avenue
Rock Island, Illinois 61201

Mr. Larry Wilson
Director
Iowa State Conservation Commission
Wallace State Office Building
Des Moines, Iowa 50319

Mr. Morris Kay
U.S. Environmental Protection Agency
Region 7
726 Minnesota Avenue
Kansas City, Kansas 66101

Dr. Lowell Soike
Deputy State Historic Preservation
Officer
Historical Building
East 12th and Grand Avenue
Des Moines, Iowa 50319



department of water, air and waste management

July 10, 1986

Doyle McCully, P.E., Chief
Engineering Section
Rock Island District, U.S. Army Corps of Engineers
Clock Tower Building
Rock Island, IL 61204-2004

RE: REQUEST FOR STATE SECTION 401 CERTIFICATION
Lakeview Boat Ramp, Saylorville Reservoir
Sec. 30, T80N, R24W, Polk County, Iowa

Dear Mr. McCully:

This Department has received and reviewed the request for State certification pursuant to Section 401 of the Clean Water Act. State Section 401 certification is required for the issuance of the Corps of Engineers Section 404 permit. Section 401 certification is this Department's concurrence that the project is consistent with Iowa's Water Quality Standards.

This Department hereby waives certification of this project in accordance with the above-mentioned Act and regulations. This waiver in no way relieves the applicant of the responsibility to meet other applicable environmental laws, rules, and regulations, Federal, State or local. A flood plain construction permit is not needed from this department.

Sincerely,

ENVIRONMENTAL PROTECTION DIVISION

Michael K. Anderson

Michael K. Anderson
Environmental Engineer
Floodplain Permits Section

MKA:b1b

Advisory Council On Historic Preservation

The Old Post Office Building
1100 Pennsylvania Avenue, NW, #809
Washington, DC 20004

MAR 13 1986

Mr. Dudley M. Hanson
Acting Chief, Planning Division
Corps of Engineers
Rock Island District
Clock Tower Building-P.O. Box 2004
Rock Island, IL 61204-2004

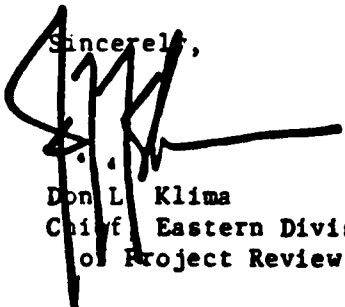
REF: MOA for Saylorville Lake, Iowa

Dear Mr. Hanson:

The enclosed Second Addendum for the Memorandum of Agreement for the referenced project has been ratified by the Chairman of the Council. This document constitutes the comments of the Council required by Section 106 of the National Historic Preservation Act and the Council's regulations. A copy of the ratified Agreement has also been sent to the Iowa State Historic Preservation Officer.

The Council appreciates your cooperation in reaching a satisfactory resolution of this matter.

Sincerely,



Don L. Klima
Chief, Eastern Division
of Project Review

Enclosure

MEMORANDUM OF AGREEMENT
SECOND ADDENDUM
RECREATIONAL DEVELOPMENT AND MAINTENANCE PROGRAM
SAYLORVILLE LAKE, IOWA

WHEREAS, the U.S. Army Corps of Engineers has completed construction of the Saylorville Lake Flood Control project, Des Moines River, Iowa; and

WHEREAS, additional work at recreation areas will consist of routine maintenance actions and improvements to existing facilities, and construction of new facilities within developed sites;

WHEREAS, sufficient archeological investigations have been conducted to identify and evaluate significant cultural and geomorphological deposits within the recreation areas covered in the attached table and maps; now

THEREFORE, the Rock Island District and the Iowa State Historic Preservation Officer (SHPO) mutually agree that cultural resource management activities for the named recreation areas shall be implemented in accordance with the following stipulations in order to take into account the effect of development and maintenance activities on historic properties pursuant to the project Memorandum of Agreement (MOA) executed on June 13, 1978, and the National Historic Preservation Act of 1966.

1. All development and maintenance projects that will affect any of the four significant archeological sites identified on the attached table and maps will be reviewed by the Rock Island District staff archeologist in accordance with current procedures to ascertain which cultural resource management stipulation applies (see item 2 below).

2. The consultation process for archeological sites and key geomorphic contexts shall be as follows:

(a) Significant (research, conserve) archeological sites/contexts identified on the attached table and maps shall be preserved through stabilization (if appropriate) or avoidance of future subsurface impacts unless data recovery as mitigation is the only prudent and feasible alternative. Stabilization may consist of vegetation, minor fill, or riprap. The formal compliance and consultation process required under Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation (ACHP) procedures (36 CFR 800) shall apply.

(b) Except for stipulation 2(a) above, further cultural resource review and consultation will not be required for:

(1) Nonsensitive areas delineated on the attached table and maps.

(2) Sites/contexts which have been sufficiently investigated through previous research as delineated (red-lined area) on the attached table and maps.

(3) Sites/contexts, as delineated (remove, destroyed) on the attached table and maps, which have been determined to contain insufficient information for future research and which would not, by their preservation or study, contribute to the significance of the Saylorville Lake Archeological District.

(4) Areas delineated on the attached maps determined to consist of made or disturbed land.

(5) Projects where minor or complete avoidance of adverse impacts can be achieved through changes in design.

3. Unanticipated cultural deposits found during development or maintenance activities will be subject to the procedures under stipulation 2(a) above.

4. Recreation areas not specifically covered under this MOA (i.e., expansions, new areas) may, after District and SHPO consultation, be added to this agreement upon completion and coordination of the appropriate evaluation and/or supplementary field investigations.

5. The 1978 MOA for the Saylorville Lake Archeological District shall remain in force, but as supplemented by this MOA until such time as any formal reevaluation proposal is executed by the District, SHPO, and ACHP. These agreements will be incorporated into the project Cultural Resources Management Plan (CRMP).

6. Recreational activities and management at the project shall continue in accordance with the existing approved Master Plan and the 1985 Operation and Maintenance Plan.

7. The Rock Island District has let a contract for the development of a cultural resources synthesis/overview, detailed geomorphological models, and a CRMP. These projects will be brought to completion and distributed in accordance with Engineering Regulation 1105-2-55 for management and legitimate research use. The Rock Island District will utilize the CRMP in the development of the OMP, and MOA revision for Saylorville Lake. Work on revising the MOA will begin during December 1985.

EXECUTION of this MOA addendum evidences that the Rock Island District has afforded the Iowa SHPO a reasonable opportunity to comment on the recreational development and maintenance program and its effects on historic properties, and that the Rock Island District has taken into account the effects of its undertaking on historic properties.

William C. Burns LTC CE
William C. Burns ACTING CDR

Colonel, Corps of Engineers
District Engineer
U.S. Army Engineer District,
Rock Island

Iowa State Historic Preservation
Officer

25 June 1985
(Date)

January 13, 1986

(Date)

Robert D. Wray

Executive Director
Advisory Council on Historic Preservation

Chairman, Advisory Council on
Historic Preservation

Feb 17, 1986
(Date)

6 March '86
(Date)

**Summary of Site Impacts and Allocations
for Recreation Areas at Saylorville Lake, Iowa**

(Adapted from Stanley and Benn 1985 - Draft: Table 9)

<u>Inform/ Site</u>	<u>Hillslope Position</u>	<u>Impacts</u>	<u>Age</u>	<u>Allocation</u>	<u>Recreation Area</u>	<u>Eligible NRHP</u>
lands						
PK235	s-sh	1c,p	UP	destroyed	Walnut Ridge	
PK25	s-sh	1c,p	UP	destroyed	Walnut Ridge	
PK25,B	s-sh	1c,6	UP	research	Walnut Ridge	-
PK120	s-sh	0c	UP	destroyed	Lakeview	-
PK197	s-sh	0c	LA-EW,MW	destroyed	Cherry Glen	-
PK233	s-sh	0c,6	LA	destroyed	Walnut Ridge	-
PK241	s-sh	1c,4,6	UP	research	Acorn Valley	-
PK280	s-sh	0c,6	e LW	destroyed	Cherry Glen	-
PK298	s-sh	0c	P	destroyed	Prairie Flower	-
PK299	s-sh	1c,6	LA,MW	conserve	Prairie Flower	-
PK300	s-sh	1c,3r,6	UP	remove	Prairie Flower	-
PK302	s-sh	0c	UP	destroyed	Prairie Flower	-
PK305	s-sh	0c	UP	destroyed	Prairie Flower	-
PK310	s-sh	0c,6	LW	destroyed	Prairie Flower (Marina)	-
PK311	s-sh	0p,6	UP	remove	Prairie Flower (North)	-
PK311,W	s-sh	1p,4,6	UP,H	remove	Prairie Flower (North)	-
PK316	s-sh	0c	UP	destroyed	Prairie Flower (North)	-
PK317	s-sh	1pc,2r,6	UP	remove	Cherry Glen	-
BN271	s-sh	1c,p	U	destroyed	Dogwood Boat Launch	-
beaches						
PK113	s-sh	3ip,6	MAI	research	Oak Grove	-
PK318	fs	1i,c	U	destroyed	Walnut Ridge	
PK139	fs	0c	UP	destroyed	Cherry Glen	-
PK240	fs	0c	UP	destroyed	Cherry Glen	-
PK247	s-sh	1c,4,6	UP	remove	Oak Grove	-
BN274	s-sh	1pc,4,6	UP	research	Laurie	+
BN276	s-sh	4,5,6	UP	research	Dogwood	+
PK295	s-sh	1crp,3r,6	UP	remove	Cherry Glen	-
PK296	s-sh	1cp,3r,6	UP	remove	Cherry Glen	-
PK321	s-sh	1pcr,4,6	LW	conserve	Bob Shetler	-
PK197	s-sh	0pc	MA,MW	destroyed	Cherry Glen	-
facies						
BN108	fs-ts(TH)	1pic,2ibr,6	LA,eMW,eLW,1LW,H	remove	Laurie	-
PK109	ts(TW)	1pic,2ib,6	LA,eMW,eLW,1LW,H	remove	Sandpiper Beach	-
PK111	ts(TW)	1ibcpr,3i,6	EAI,MAII,LA,EW, MW,1LW-GO,H	remove	Oak Grove	-
PK112	ts(TW)	0ibcpr	UP	destroyed	Oak Grove	
PK155	ts(TW)	0ibcpr	UP	destroyed	Oak Grove	
BN272	ts(TW)	1p,3i,6	UP	conserve	Sportsmen	+
BN275	ts(TH)	1picb,3ib,6	UP,H	conserve	Lauri	+
PK320	ts(TI)	1pc,6	ON	remove	Cottonwood	-

Hillslope Position

Impacts

Age

s-sh=summit/shoulder
fs=footslope
ts=toeslope
TW=Wis. terrace
TH=High terrace
TI=Intermed. terrace
TL=Low Terrace

0=destroyed
1=impacted
2=probable impact (future)
3=possible impact (future)
4=no future impact
5=out of CE
boundary
6=excavated
i=inundated
b=bank erosion
c=construction
p=plowing
r=recreational
v=vandalism

UP=Undetermined Prehistoric
E,e=early
M=middle
L,l=late
A=Archaic
W=Woodland
GO=Gr. Oasis
ON=Oneota
H=Historic
I,II=period



United States Department of the Interior

FISH AND WILDLIFE SERVICE
ROCK ISLAND FIELD OFFICE (E5)
1830 Second Avenue, Second Floor
Rock Island, Illinois 61201

IN REPLY REFER TO:
Commercial: 309-793-5800
FTS: 386-5800

April 18, 1984

Lt. Colonel Arthur E. Miller
Acting District Engineer
U.S. Army Engineer District
Rock Island
Clock Tower Building
Rock Island, Illinois 61201

Dear Colonel Miller:

This is in reference to Mr. Klingerman's letter of April 16, 1984, regarding the environmental assessment for the Revised Saylorville Lake Master Plan. We previously objected to the Finding of No Significant Impact (FONSI) because appropriate mitigation was not incorporated specifically into the proposed plan. Based on information provided by your staff, we understand that adequate mitigation measures have been discussed with and accepted by the Iowa Conservation Commission. These measures include habitat improvement measures such as prairie restoration, timber stand improvements, and pothole development.

We can now concur with the FONSI with these measures incorporated into the proposed plan. This letter provides comment under the authority of and in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act of 1969 and the Endangered Species Act of 1973, as amended.

Sincerely,

Gail A. Peterson
Acting Field Supervisor

cc: FWS/AH



Larry J. Wilson - Director
 Wallace State Office Building, Des Moines, Iowa 50319
 515-281-5145

An EQUAL OPPORTUNITY Agency

December 20, 1983

Colonel Bernard P. Slofer
 U.S. Army Corps of Engineers
 Clock Tower Building
 Rock Island, Illinois 61201

Dear Colonel Slofer:

We appreciate the opportunity to provide comments on the Environmental Assessment, Revised Saylorsville Lake Master Plan. As we reviewed the assessment, a more thorough review of the Master Plan itself took place. In the process there arose some uncertainties, pointed out below in our specific comments, that force us to qualify our comments to the extent that if additional site-specific knowledge is provided, we might wish to make additional inputs. Certainly as any planning progresses toward implementation, it will be essential that coordination between the Corps and the State be maintained.

Specific comments are as follows:

Item B, Page 2--Sandy/Sher Recreation Area

The Conservation Commission does not agree that a largely single-purpose sailboat launching facility is the proper route to take, and would not be supportive of a 50-50 cost-shared facility of this type. As a more desirable alternative, we would recommend the provision of a sailboat docking area and dry storage facility located just north of the one proposed in Plate 3. Existing nearby ramps could serve the needs of all boaters with the provision of rigging lanes, thereby greatly reducing the costs associated with peninsula construction, additional ramps, etc.

Item C, Page 2--Second Marina

The Conservation Commission prefers the site southeast of the Lakeview Recreation Area for a second marina site. This alternative would provide increased ease of access to the lake for more area residents and would avoid additional congestion anticipated if a second marina were located in such close proximity to the existing one. If a second marina is deemed necessary, it would seem appropriate that the Corps provide the usual road, ramp and parking facilities, and that the developer would incur the usual costs for buildings, docks, utilities, etc.

Colonel Bernard P. Slofer
 December 20, 1983
 Page 2

Item D, Page 3--Trails

The Commission strongly endorses the provision of additional multipurpose trail facilities (including snowmobiles) downstream from Highway 17. Such trails will require planning and coordination to assure that all interests are protected. While there will be requirements for caution in laying out such trails and the need for maintenance and enforcement to assure safe and proper use, these facilities could serve a variety of users and enhance public benefits to be derived from the project. In order to avoid one major potential source of conflict, any snowmobile trails located in lands open for public hunting north of Highway 17 should not be opened for snowmobile use until after the close of the shotgun deer season each year, typically around mid-December. Ultimately, a trail might run to Highway 30. However, a trail through the wildlife management area would have to be developed with special considerations of location, time of use, and funding for development, management, and enforcement responsibilities.

Prairie Flower Group Campground

The following is an excerpt from the Conservation Commission unit biologist's comments. We urge you to consider these comments and to continue to coordinate with the unit biologist and this office as any plans proceed toward implementation.

"...negative impacts were significant at the Prairie Flower Group Campground. Expansion of the campground would mean that 50 acres of idle grasses, forbs, and shrubs will be converted to mowed grass, roads, parking areas, and camping pads. High use periods during summer will disturb wildlife to the point that its value as a nesting area or brood-rearing area will be very limited. In addition, a possible second marina site could potentially be placed to the west and northwest of the Prairie Flower Campground and this will reduce the habitat base even more in this area (25 acres)."

"The Prairie Flower site is an open, upland site which is currently dominated by dairy fleabane, bluegrass, and encroaching multiflora rose. It is currently nesting and brood-rearing habitat for pheasants, quail, and various songbirds (i.e. catbird, common yellowthroat, dickcissel, field sparrow, grasshopper sparrow, meadowlark, goldfinch, etc.). Although its quality as pheasant nesting habitat is not outstanding, it does provide the type of undisturbed site that some birds will use. This type of site is particularly valuable on the Saylorsville area because most of it is of high elevation and will not flood."

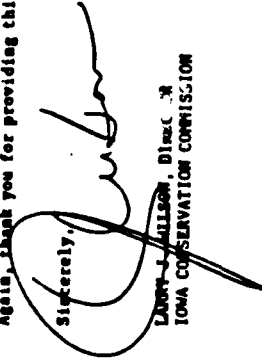
"Corps personnel advise that portions of the site probably will have new land management practices applied to it that will benefit wildlife even more. Their plans are to try to control the encroachment of multiflora rose by the establishment of small corn fields and hay fields. This could improve the area for game species such as pheasant and quail by providing food and nesting cover. However, even this would be lost if the area was converted to a campground."

Colonel Bernard P. Slofer
December 20, 1983
Page 3

"The tract where the Prairie Flower Group Campground is proposed is 80+ acres (50 acres of which is proposed for campground development). Remaining acreage (approximately 34 acres) will be treated with wildlife habitat improvements such as "buffer" prairie grass seedings, tree and shrub hedge rows, etc. These will improve the area for wildlife but still do not adequately mitigate for the loss of a 50-acre chunk of habitat."

Again, thank you for providing this opportunity for comment.

Sincerely,



LARRY J. ALLISON, Director
IOWA CONSERVATION COMMISSION

CLEAN WATER ACT
SECTION 404 (b)(1) EVALUATION
FOR
PROPOSED BOAT LAUNCH AND ACCESS FACILITIES
SAYLORVILLE LAKE
POLK COUNTY, IOWA

AUGUST 1986

CLEAN WATER ACT
SECTION 404(b)(1) EVALUATION
FOR
PROPOSED BOAT LAUNCH AND ACCESS FACILITIES
SAYLORVILLE LAKE
POLK COUNTY, IOWA

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CLEAN WATER ACT

SECTION 404 (b)(1) EVALUATION

FOR

PROPOSED BOAT LAUNCH AND ACCESS FACILITIES

SAYLORVILLE LAKE

POLK COUNTY, IOWA

SECTION 1 - PROJECT DESCRIPTION

LOCATION.

The project consists of a boat launch and supporting facilities at Saylorville Lake which is operated by the U.S. Army Corps of Engineers, Rock Island District. The proposed site area is south of the existing Lakeview Recreation Area located in Polk County, Iowa (See plate 1.) Facilities applicable for addressment in this document include the boat launch and boatway. Other supporting facilities include two parking lots, a primary access road, and a secondary access road. Those facilities have been discussed in the Environmental Assessment.

GENERAL DESCRIPTION.

The proposed boat launch would be located approximately 200 yards south of the existing Lakeview Recreation Area on the west shoreline of the lake. The ramp will have 2 paved lanes, two 100-foot turning radii, and be approximately 500 feet long and 50 feet wide. Approximately 50 feet of the ramp will extend into the lake. About 4,000 tons of riprap will be used to protect the structure, of which 1,200 tons will be placed in the water. In addition, approximately 60 tons of Class A stone will be placed in the water to serve as a foundation for the ramp.

The boatway construction would be adjacent to the proposed ramp. It would consist of a six-foot wide concrete walkway, a six-foot deep excavated boat channel 14 feet wide with 4,200 square feet of concrete floor, a 4,000 square-foot steel sheet pile retaining wall on the ramp side, and 2,500 tons of riprap. The water levels around the immediate project sites would be lowered with the use of cofferdams about 6 feet from their conservation pool levels to allow for construction. Plate 2 shows the location of the boat ramp, and Plate 3 shows a cross section of the boatway.

AUTHORITY AND PURPOSE

The development of recreational facilities at Saylorville Lake was initiated at full Federal expense under the direction of Section 4 of the Flood Control Act of 1944.

The proposed launch ramp and boatway would meet a portion of the existing unfulfilled demand for additional launch facilities at Saylorville Lake. In addition, the quality of the recreational experience would be improved and user safety would be enhanced.

GENERAL DESCRIPTION OF DREDGED AND FILL MATERIALS

Materials excavated from the boat ramp and boatway consist of sediment and underlying soils. These materials would be disposed of above flood control pool elevation on nearby reservoir land, except for that which would be used for channel wall backfill. Excavated material will be approximately 20,000 cubic yards for the site. Backfill for the wall is approximately 10,000 yards.

Granular base for the boat ramp and channel floor would consist of crushed stone or gravel. Approximately 240 tons per 200 feet of boatramp would be used.

Bedding for the riprap would consist of crushed limestone. Approximately 1,300 tons per 200 feet of boat ramp and boatway would be used.

Riprap would consist of quarried limestone, and approximately 6,500 tons per 200 feet of boat ramp and boatway would be used.

DESCRIPTION OF THE PROPOSED DISCHARGE SITE

The site is proposed at this time. This Section 404(b)(1) Evaluation and the attached Environmental Assessment have been prepared. The ramp and boatway would be placed in a transition zone between a bottomland open area and an upland hardwood forest. The zone is primarily open with first stage successional species having a small number of water-tolerant trees in the lower elevation of the zone and a small number of sapling and intermediate size hardwoods in the upper elevation of the zone. The extreme water fluctuation of the flood control reservoir limits the vegetation found along the shoreline to sparse adventitious weeds and forbs.

DESCRIPTION OF DISPOSAL METHOD

Dredged materials would likely be bulldozed or backhoed out, and the material not used for backfill would be hauled away by truck.

Construction materials (concrete, riprap, granular fill, and bedding) would also be trucked in.

SECTION 2 - FACTUAL DETERMINATIONS

PHYSICAL SUBSTRATE DETERMINATIONS

The reservoir bottom in the project area is covered by a varying amount of fine silt (sediment). There are two primary soil types in the site area: loams on slopes of 1-14 percent, and a Lester - Colo complex on slopes of 14-40 percent. Portions of the area were used as borrow material to construct the reservoir dam.

WATER CIRCULATION, FLUCTUATION, AND SALINITY DETERMINATIONS

Water chemistry, clarity, color, odor, taste, dissolved gas levels, nutrients, and eutrophication will not be significantly affected by the project. Salinity determinations are not applicable to the area. Circulation, flow, velocity, stratification and hydrologic regime will not be significantly affected. Normal water fluctuations will not be altered by the project. Current pattern may be slightly altered by the structure.

SUSPENDED PARTICULATE/TURBIDITY DETERMINATIONS.

There will be a minor temporary increase in suspended particles and turbidity during construction and placement of the riprap. However, current and wave action will quickly dilute the area to ambient levels. Light penetration and dissolved oxygen will not change. Toxic metals, organics and pathogens should not be present in the commercially-quarried rock fill.

CONTAMINANT DETERMINATIONS

Construction materials such as concrete, granular fill, bedding, and riprap will be chemically stable and noncontaminating. Backfill will come from materials that are normal components of the reservoir system and are periodically resuspended by wave action or boat traffic.

AQUATIC ECOSYSTEM AND ORGANISM DETERMINATIONS

The proposed action should not have a significant impact on the aquatic ecosystem. Impacts to benthos, plankton, and nekton, as caused by the construction of the boat launch and boatway would be temporary and minor. The use of riprap on the silty substrates would increase habitat diversity by providing stable surfaces and crevices. Aquatic biota will benefit from placement of the rock fill. Primary production, photosynthesis, suspension/filter feeders, and sight feeders will all benefit from the increased habitat diversity.

No wetlands or any unique or sensitive aquatic habitat would be impacted by the proposed project.

The construction area would be dewatered to avoid excess turbidity and sedimentation of the pool. The majority of dredged materials (except for that to be used as backfill) will be placed above the flood control pool elevation.

There are no federally listed endangered species listed for Polk County, Iowa. The bald eagle (*Haliaeetus leucocephalus*) does use the tailrace area below the dam for feeding and perching during the winter months. The proposed facility is approximately 1 mile northwest of the tailrace and would not be in use during the winter months. Therefore, no impacts are anticipated.

PROPOSED DISPOSAL SITE DETERMINATIONS

Proposed disposal sites for construction materials (riprap, concrete, bedding, granular fill, and backfill) have been predetermined and are required to be placed adjacent to the proposed facilities. Excess dredged material (that not needed for backfill) will be placed on an upland site.

DETERMINATION OF CUMULATIVE AND SECONDARY EFFECTS ON THE AQUATIC ECOSYSTEM

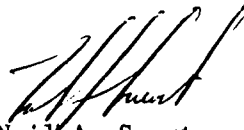
This proposed project is not expected to have any cumulative effect(s) on the aquatic ecosystem. Benthic and other aquatic organism should recover within a short period of time. No detrimental cumulative impacts are anticipated to occur as a result of this project.

SECTION 3 - FINDING OF COMPLIANCE OR
NONCOMPLIANCE WITH THE RESTRICTIONS ON DISCHARGE

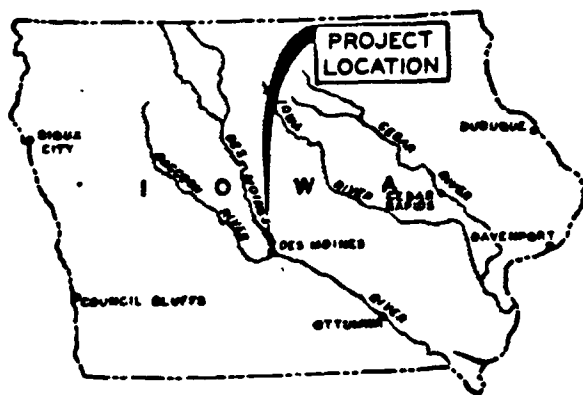
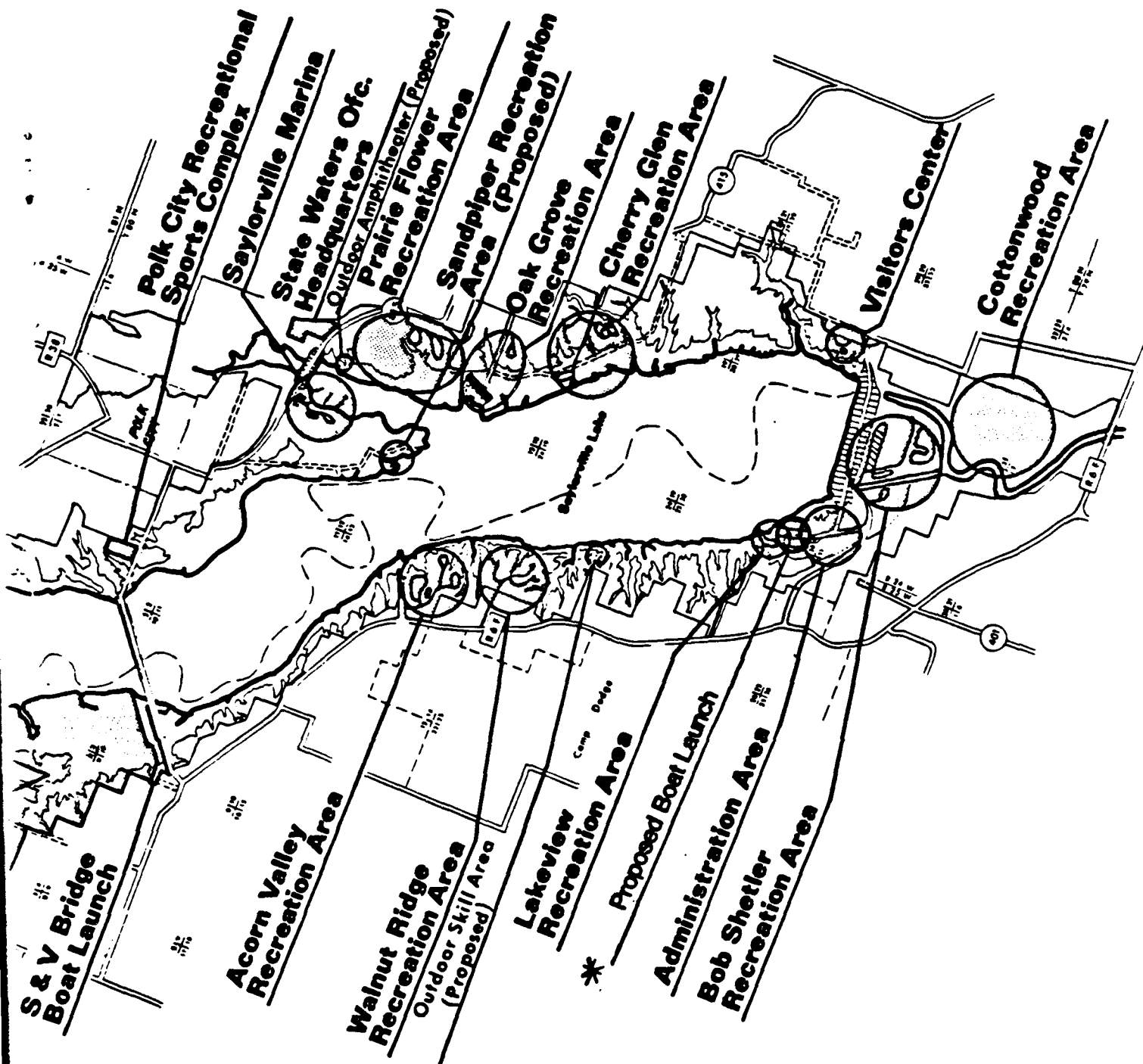
1. No significant adaptations of the 404 (b)(1) guidelines were made relative to this section.
2. Alternative sites were identified for the project but were not selected due to the potential for increased terrestrial and aquatic impacts in comparison to the selected site.
3. Certification under Section 401 of the Clean Water Act has been waived by the Iowa Department of Water, Air, and Waste Management.
4. The project would not introduce toxic substances into nearby waters or result in appreciable increases in existing levels of toxic materials.
5. No significant impact to Federal or State-listed endangered or threatened species will result from this project.
6. The boat ramp and boatway construction are in inland fresh water systems. No marine sanctuaries are involved.
7. No municipal or private water supplies would be affected. Recreational values would be increased. Minor impacts would result from the construction site, but an increase in habitat diversity would occur with the use of riprap and terrestrial wildlife plantings. No sensitive or critical habitats would be affected, and no long-term impacts would occur.
8. Project construction materials will be physically and chemically stable. The majority of excavated material will be disposed of above the flood control pool.
9. The proposed actions will not significantly affect water quality or the aquatic ecosystem and are in compliance with the requirements of guidelines for section 404 (b)(1) of the Clean Water Act, as amended.

9 Sept 86

date



Neil A. Smart
Colonel, Corps of Engineers
District Engineer



US Army Corps
of Engineers
Rock Island District

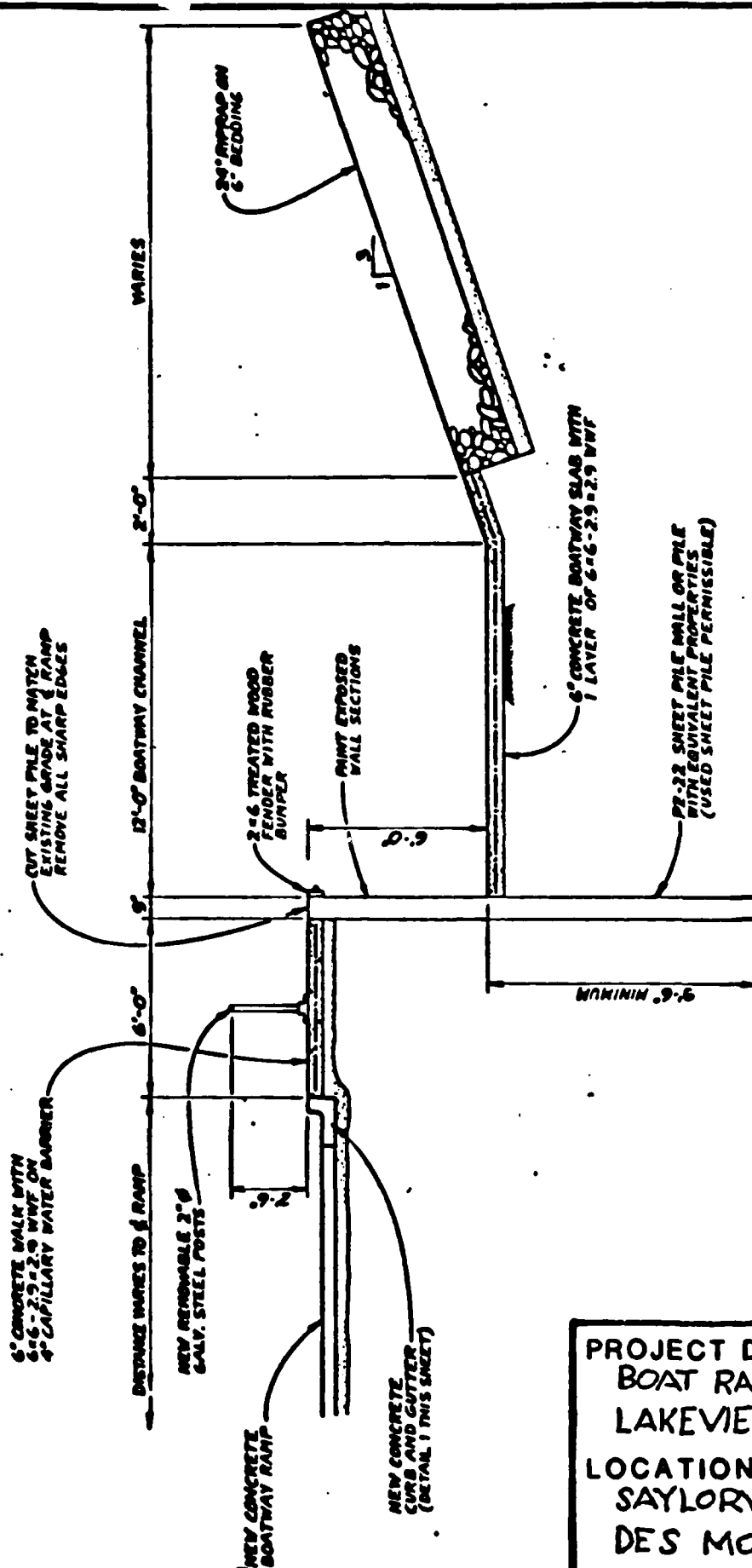
Saylorville Lake Master Plan

RECREATION AREAS

Legend

- Flood Pool Limit
- City Limits
- Project Boundary
- Paved Road
- Unpaved Road





PROJECT DESCRIPTION:
 BOAT RAMP & BOATWAY
 LAKEVIEW MARINA
LOCATION:
 SAYLORVILLE LAKE
 DES MOINES, IOWA

TYPICAL SECTION - NEW BOATWAY CHANNEL

SCALE: 3/8" = 1'-0"

END

DATE

FILMED

DTIC

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